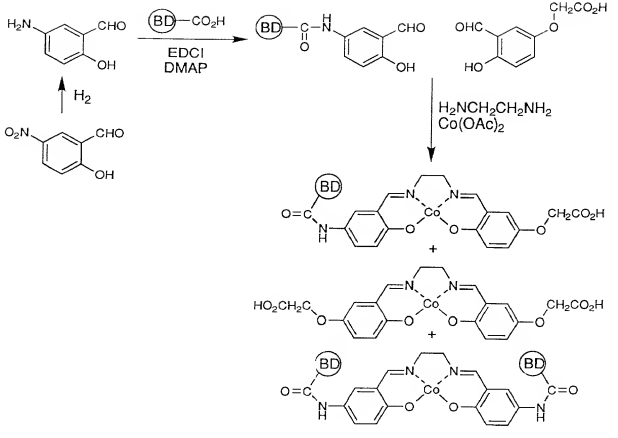
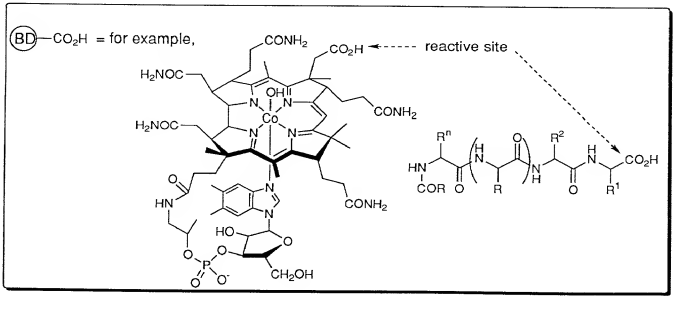
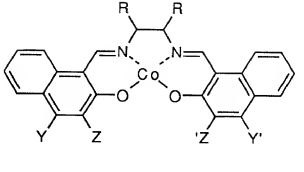
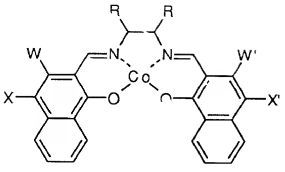

EDCI
DMAP
H2
H2NCH2CH2NH2
Co(OAc)2

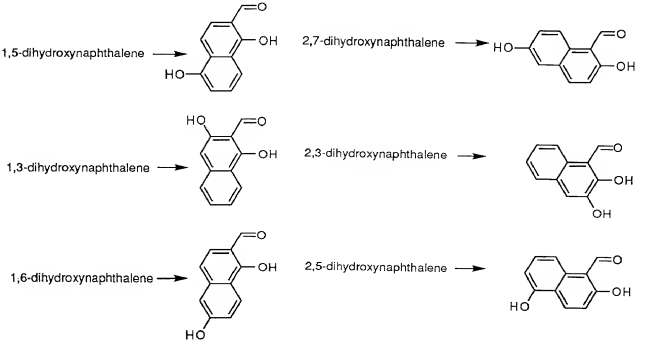

= for example,
reactive site

Extended benzenoid systems of the SALEN ligands are shown below.

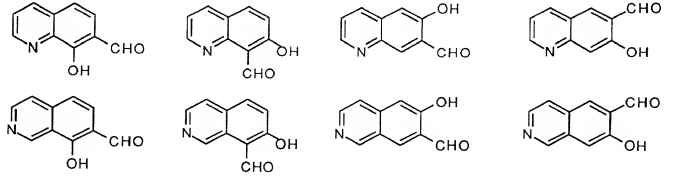




As a starting point in their synthesis, any of the commercially available naphthalene diols can be used. The diols undergo formylation reactions to furnish the molecules shown below. These moleucles are then be coupled with Co(II) acetate and various diamines to give the extended Co[SALEN] complexes. The OH groups on the second ring can be left intact, used to attach the binding domain, or modified to enhance water solubility through attachment of a polar group, such as polyamine, polycarboxylic acid, or carbohydrate moiety.



Modification of quinolines and isoquinolines are also carried out to give pyridine-fused SALENs.



Along similar lines, SALENs derived from monocyclic heteroyclic hydroxyaldehydes are made, examples of which are shown below.